

**TESTIMONY OF
THOMAS C. VOLTAGGIO
DEPUTY REGIONAL ADMINISTRATOR
MID-ATLANTIC REGION
U.S. ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE
SUBCOMMITTEE ON THE DISTRICT OF COLUMBIA
COMMITTEE ON GOVERNMENT REFORM
U.S. HOUSE OF REPRESENTATIVES**

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Good morning, Chairwoman Morella and Members of the committee. I am Tom Voltaggio, Deputy Regional Administrator for the EPA's Mid-Atlantic Regional Office. I am pleased to be here today to discuss the on-going cleanup activities in the Spring Valley neighborhood here in the District of Columbia.

In today's testimony I would like to report on the site activities since last summer's hearing; discuss other Formerly Used Defense Sites (FUDS) in the District, and, most importantly, offer EPA's judgment on the remaining health risks to the residents of Spring Valley. Let me address that last issue first:

The risk from buried munitions and chemical weapons at Spring Valley is real, but appears to be well contained. Some sites have been identified, but they are being cleaned up in a way that is protective of both the workers doing the removal action and the neighboring community.

The risk from arsenic contaminated soil is now very well characterized. While there is a limited amount of additional sampling that needs to take place, we can today say with confidence that nearly 90% of the homes in the Spring Valley neighborhood do not have elevated arsenic levels that present any significant long-term threat to human health. I can make that statement based on sampling that has taken place in people's yards and measured against a scientifically-based standard. In the cases where elevated levels of arsenic have been identified, we know how to clean up the properties and are putting into place a plan to conduct those cleanups in a worst-case first fashion. Homeowners have been notified and have been given advice about how to limit their exposure until the cleanups are completed. None of the levels presents an immediate threat to human health. Arsenic soil cleanup is required in these cases to eliminate the long-term threat that these soils pose if people were to be exposed to them for decades without remedial action. Soil cleanup of residential properties to address arsenic will begin next month.

In summary, the vast majority of residents of Spring Valley appear to be at no unacceptable risk due to World War I era chemical weapons work that took place in that neighborhood. Today there is still a substantial, highly site-specific risk at the ordnance disposal areas. And there is a long-term risk for about 10% of local homeowners because of arsenic-contaminated soils. That risk is only related to long-term exposure and cleanup of those properties will be underway shortly.

Status Report on EPA's Activities At Spring Valley Since Last July

On a number of important fronts, I can report today that progress at the site is moving ahead at a good pace.

Since last July the team, consisting of the Corps of Engineers, EPA and the District government, have worked diligently on a number of the issues that you specifically identified as weaknesses in the response actions at Spring Valley. Let me be specific:

- The Corps has conducted an extensive investigation and cleanup of a burial pit that it identified on Glenbrook Road. As of this spring, the Corps had found nearly 400 pieces of ordnance, 11 of which contained the chemical warfare agents mustard and lewisite; 60 glass bottles and 3 cylinders, 24 of which contained mustard agent, lewisite, and acids; 5 metal drums, and fragments of another 8 pieces of ordnance.
- Tons of contaminated soils in the Child Development Center have been removed, and the Korean Ambassador's residence work is virtually complete.
- Citizen involvement is much higher with the creation of the Restoration Advisory Board, and the partners value the RAB's input to the project. In addition, the team participates in periodic meeting with the general public.
- Over 1,300 properties in Spring Valley have been sampled for arsenic and other compounds, including 95% of the residential properties.
- Removal of soils on American University and for at least seven homes with high arsenic will be completed this Summer.
- The Corps has committed to conduct a ground water study and extensive further investigation

of buried ordnance.

In short, the actual cleanup of hazards is moving ahead with vigor.

- Indeed, the amount of hazardous substances that have been removed in the last 11 months is roughly comparable to all of the materials that had been removed in the previous eight years.
- The spotty communications with local residents has been replaced with an active citizen-led Restoration Advisory Board, a group that had just been formed when the subcommittee held its hearing last summer.
- In addition, the sometimes contentious relationship among the Corps, EPA and the District has been transformed into a partnership. We still have our disagreements, but the group is now better able to reach consensus on important policy issues. For example, on the difficult issue of deciding on a cleanup standard, we have reached agreement on 20 parts per million of arsenic, a standard that has been independently endorsed by the Mayor's Science Advisory Panel.

And importantly for the many people who live and work in the area, we are now nearing the completion of the arsenic sampling of every property in Spring Valley, an effort that had just begun a year ago. Almost 90% of the residential properties can now be declared free of any dangerous levels of arsenic. Fewer than a dozen homes have levels high enough to warrant quick removal, and that will be done in the next few months. The other residences with slight- to moderately-elevated arsenic levels

will be remediated on a schedule that follows the higher risk cleanups.

Specific Examples of EPA's Recent Efforts at Spring Valley

EPA is providing continuing oversight of the Corps efforts and technical assistance to the partners. EPA has spent a substantial amount of effort to provide the public generally and the RAB specifically with information relevant to the site cleanup. EPA's Environmental Photographic Interpretation Center (EPIC) continues to provide valuable insights to the project team, including digital correlation between historic operations and contemporary maps.

As an aside, let me also note that Delegate Norton was justifiably critical of EPA at last summer's hearing when I testified that the aerial photographic analysis done by EPIC in 1986 for the Army had not been shared with my hazardous sites cleanup staff in Region III until several years later. That obvious failure to effectively communicate among EPA offices has been rectified. EPIC no longer does independent contract work. Today any federal agency that would want to use EPIC's photographic interpretation expertise would have to go through either EPA Headquarters or the Regions. EPIC continues to provide important support to the overall Spring Valley effort, but now and in the future it is being done with our full knowledge.

Concerns have been raised about the quality of the data generated by the Corps and its contractors. Consequently, in the past year EPA has made a substantial effort to verify that the Corps' arsenic data is of acceptable quality. The quality assurance and quality control plans and lab procedures

were reviewed by EPA's Environmental Science Center at Ft. Meade, Maryland, and found to be acceptable. Samples with known levels of arsenic were sent to the Corps' lab to test its accuracy and the lab passed the test. EPA collected split samples, analyzed them and performed a statistical analysis which showed that the Corps data was the same as EPA's within normal data variation limits.

EPA provided field oversight of Corps activities, performed reviews of important documents, and participated in project planning and partnering meetings.

EPA participated in community and RAB meetings, and provided the public and RAB members with substantial information on arsenic background levels, arsenic toxicity, and typical arsenic cleanup levels across the country. EPA provided information on EPA's soil sampling procedures under several different EPA guidance documents.

EPA developed draft comfort letters, draft warning letters and discussed EPA's plans to produce a registry of residential properties that have been remediated or did not need remediation. EPA also worked closely with the Corps to ensure continued access to specific properties in the neighborhood.

EPA coordinated with DC Health, the Corps, the Senior Environmental Review Group, the RAB and the Mayor's Science Advisory Panel to finalize the soil cleanup level of 20 ppm arsenic in soils for Spring Valley. EPA will work with the Corps and residents to allow flexibility of up to 43 ppm

in the cleanup level at a few homes when it will minimize impacts on properties without reducing protectiveness.

EPA's Comments on the GAO Report

EPA has not seen the final GAO Report, so my comments on the Report are necessarily limited to the draft version we received over a month ago. We submitted comments to the GAO on the draft and I assume that those comments were either incorporated into the final report or included as an appendix, as is GAO's custom. Consequently, I will not go into detail on those items during my testimony today.

Generally we believe the draft report has done an excellent job presenting the substantive historical facts of this very complex and challenging site cleanup.

The GAO notes positively the important role of the robust partnership that now exists among the Corps, EPA and the District. As I noted earlier, we share that perspective, and believe that the partnering effort has allowed the cleanup to move ahead with both speed and thoroughness.

At the time of the draft report, the partners had not finalized our agreement on an arsenic cleanup level. That important decision has been made, and EPA is now confident that the cleanup level will be appropriately protective of human health. This critical part of the cleanup, the part in which EPA has the most expertise and experience, can now move ahead with a much greater degree of certainty. Spring Valley is perhaps the most carefully characterized neighborhood in the country, and the team

now has a nearly complete roadmap as to what soils will need to be remediated and a scientifically-based priority listing for that phase of the cleanup effort.

I realize that there is no such thing as a “routine” cleanup of arsenic contaminated soils if they are on your property, but I can assure the subcommittee that the kind of soil remediation needed is the kind of work that we have extensive experience in dealing with. The technical difficulties in removing these kinds of soils are not great.

The identification, excavation and removal of ordnance-related items, however, is a different situation entirely. And in this regard, too, we are in agreement with the GAO draft report. There are enormous uncertainties still in this phase of the cleanup work. As I have noted before, the Corps has the expertise in this challenging part of the cleanup. EPA and the District will continue to support this phase of the cleanup in part by working diligently to identify suspected ordnance disposal areas. Whereas the arsenic sampling is nearly complete and we have a pretty thorough idea about the scope of the contaminated soil problem, the team does not have the same level of certainty regarding ordnance, and the GAO is right to emphasize the uncertainty associated with this part of the overall effort. Additional caches may be discovered, and if they are, significant additional work will need to take place. And additional work, of course, means more time and money.

The good news is that we have a rigorous effort underway to identify any other burial pits, and the Corps has demonstrated its expertise in actually removing caches of old chemical munitions safely.

Finally, the GAO draft report discusses the statutory responsibility for the cleanup of this

Formerly Used Defense Site. There is consensus among all the participants that it is the Department of Defense's responsibility to cleanup Spring Valley. And regardless of whether that cleanup would occur under the FUDS program authority or under EPA's superfund program authority, the Army would have primary responsibility for the cleanup effort and would have to pay for that effort.

Status of EPA Activities At Other FUDS In or Near DC

In addition to Spring Valley, there are dozens of other FUDS located within the District of Columbia. Of these, three are associated with the chemical weapons testing done at American University in the early 1920's, 25 are former forts designed to protect the capitol during the Civil War, and one is associated with the manufacturing of ordnance. Information from our review effort continues to come in on these as well as for the remaining sites. We are finding that most of the remaining sites were used primarily for troop support and administration and which we believe pose little risk of contamination.

EPA has been working with the Corps of Engineers and the DC Department of Health to focus our efforts on those sites deemed high priority based on information from historical documents culled from the Corps of Engineers' files and national archives, previous studies and investigations completed by the District and the Corps, and aerial photographs from the time frames in question. We've also been working with the Navy Research Lab and the National Park Service on a site being investigated for possible usage as a disposal area for munitions from American University.

Currently, we have reviewed the entire FUDS list and have identified three sites that we believe

should receive attention in the near future. These are: 1) The former Maloney Chemical Lab at Catholic University; 2) Diamond Ordnance Fuze Lab, and 3) C & O Canal near the Chain Bridge area. The Maloney and Diamond Ordnance sites have a history of potential contamination, and the C&O Canal site has been identified as a suspected ordnance burial location although no specific hazardous materials have been found there. Our review of the other FUDS continues as information is received from our file review effort, and in addition to the evaluation of past disposal practices, we are also considering other factors such as proximity of schools and population demographics in determining sites which may require additional investigation. Finally, we are reviewing information to locate the site of a one day test of chemical materials, referred to as the Conduit Road Field Test Site by old Army documents.

The Corps of Engineers has funded further investigative work at the Maloney Chemical Lab and is working with EPA and the District to develop a work plan for the sampling effort. Because the Corps reports that no additional Defense Environmental Restoration Program funding is currently available now or likely in the next year for the other two sites, EPA plans to take a larger role in investigating them. For example, we are reviewing the Preliminary Assessment and aerial photography for the former Diamond Ordnance Fuze Lab to determine the direction of site investigation work.

Conclusion

EPA believes that the Spring Valley cleanup is moving in the right direction, although this massive effort will take a substantial time to complete. EPA will continue to assist the partnership in the coming years of the project. EPA will also assist in the effort to investigate FUDS in the DC area.

I would also like to again acknowledge the work of the other organizations that have been involved in this cleanup effort. The Corps continues to commit substantial resources, expertise and effort to this extremely challenging project. The District of Columbia also deserves special praise. The research conducted by some of its staff both in the past and recently has given other team members extremely valuable new information. The work of various health experts such as the Agency for Toxic Substances and Disease Registry, the Mayor's Science Advisory Panel, and the District's Department of Health are also noteworthy.

Thank you for the opportunity to testify. I would be happy to answer any questions.